Claims.

1. (Currently Amended) Vessel for ~~receiving or melting~~ molten silicon comprising a silicon composite thermet sprayed coating comprising metal silicon, silicon nitride and silicon oxide on at least a part of the interior wall of the silicon holding vessel, ~~**characterized in that**~~ the silicon composite thermet sprayed coating ~~has~~ comprising a mixing ratio of metal silicon (X): silicon nitride (Y): silicon oxide (Z) of X:Y:Z: = 20-50: 77-30: 3-20.

2. (Currently Amended) A vessel according to claim 1, ~~**characterized in that**~~ wherein the silicon composite thermet sprayed coating is formed by spraying a silicon composite thermet material made by adding metal silicon as a bonding material to a mixture of ~~Si_3N_4 and SiO_2~~ silicon nitride and silicon oxide.

3. (Currently Amended) A vessel according to claim 1 ~~or 2~~, ~~**characterized in that**~~ wherein the silicon holding vessel ~~is made from~~ comprises a material ~~comprising~~ selected from a group consisting of silicon oxide, boron nitride ~~and/or~~ and graphite.

4. (Currently Amended) A vessel according to claim 3, wherein the silicon oxide ~~(SiO_2)~~ is selected from a group consisting of densified fused silica ~~or~~ and sintered fused silica.

5. (Currently Amended) A vessel according to claim 1, ~~**characterized in that**~~ wherein the coating has a thickness of 20-500 μm~~, preferably of 50-300 μm~~.

6. (Currently Amended) A method of producing a vessel for ~~receiving or melting~~ molten silicon, ~~which comprises~~ the method comprising spraying a silicon composite thermet material ~~consisting of~~ comprising metal silicon, silicon nitride and silicon oxide on ~~the~~ an interior wall of ~~said~~ the vessel, thereby forming a silicon composite thermet sprayed coating wherein the silicon thermet sprayed coating has a mixing ratio of metal silicon (X): silicon nitride (Y): silicon oxide (Z) of X:Y:Z: = 20-50: 77-30: 3-20.

7. (Currently Amended) A method according to claim 6, wherein ~~said~~ the vessel ~~is made from~~ comprises a material ~~comprising~~ selected from a group consisting of silicon oxide, boron nitride ~~and/or~~ and graphite~~, preferably densified or sintered fused silica~~.

8. (New) A method according to claim 7, wherein the silicon oxide comprises densified fused silica.

9. (New) A method according to claim 7, wherein the silicon oxide comprises sintered fused silica.

10. (New) A vessel according to claim 1, wherein the coating has a thickness 50-300 μm.